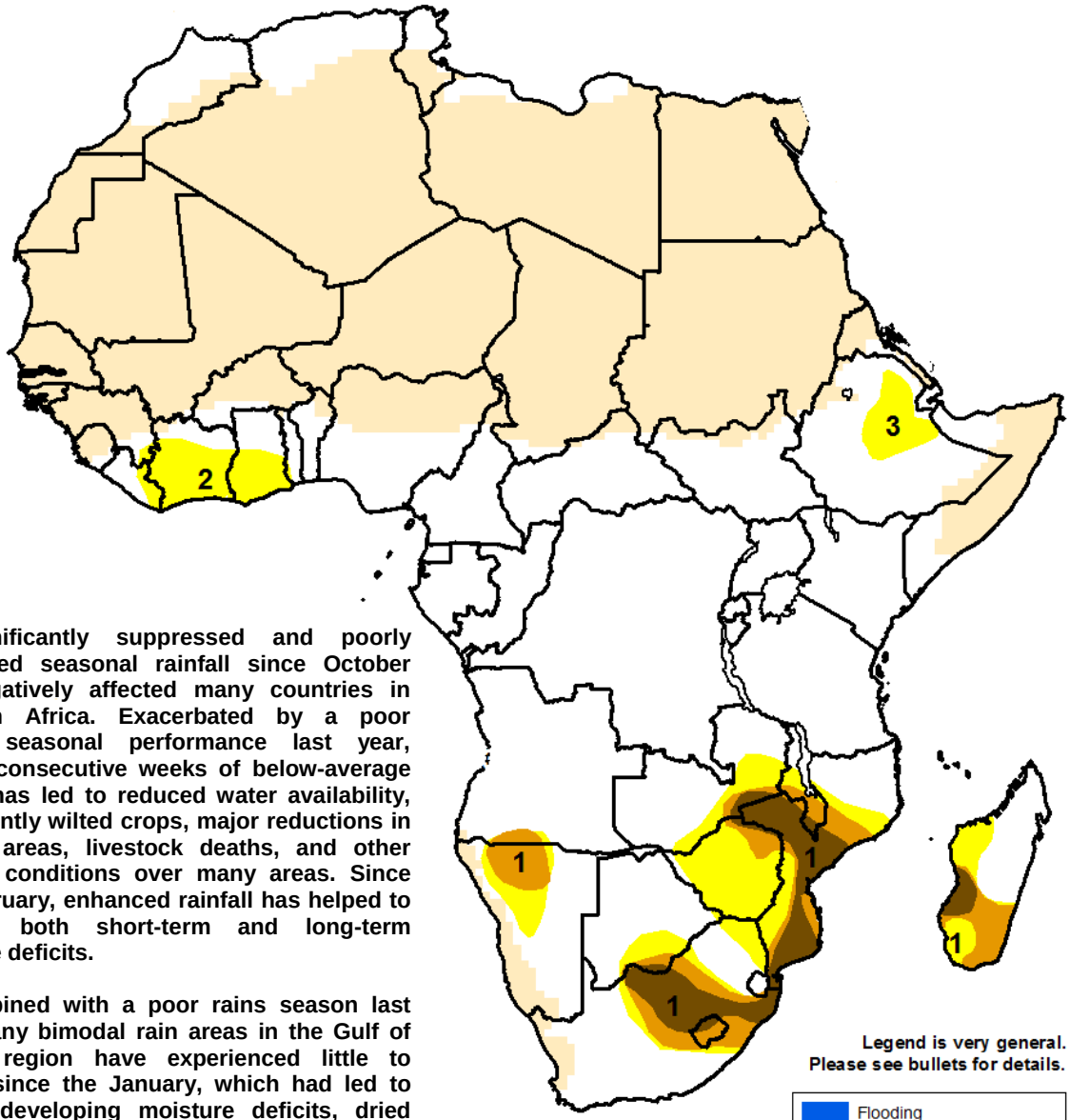
Climate Prediction Center's Africa Hazards Outlook
March 31 – April 6, 2016

- **Enhanced late season rains bring continued moisture recovery for many areas across southeastern Africa.**
- **Below-average precipitation recorded for second consecutive week throughout Ethiopia.**



1) Significantly suppressed and poorly distributed seasonal rainfall since October has negatively affected many countries in southern Africa. Exacerbated by a poor rainfall seasonal performance last year, several consecutive weeks of below-average rainfall has led to reduced water availability, permanently wilted crops, major reductions in planted areas, livestock deaths, and other adverse conditions over many areas. Since late February, enhanced rainfall has helped to mitigate both short-term and long-term moisture deficits.

2) Combined with a poor rains season last year, many bimodal rain areas in the Gulf of Guinea region have experienced little to rainfall since the January, which had led to quickly developing moisture deficits, dried rivers, and crop losses.

3) Poorly distributed seasonal rainfall since late February have led to strengthening moisture deficits for many areas in central and northern Ethiopia. Average to above-average rainfall is forecast for the region during the next week.

Slightly increased moisture observed in Ethiopia towards the end of March.

During the last observation period, a slight increase in rainfall was received across some areas of Ethiopia compared to the previous week. According to satellite rainfall estimates, isolated, heavy rainfall accumulations (>50mm) were registered in the eastern Amhara and Afar regions of the country, with lesser but better distributed, light to moderate precipitation amounts (10-50) observed towards the south and west (**Figure 1**). Towards the east, little to no rainfall was received throughout the Somali region of Ethiopia, as well as, throughout eastern Kenya and Somalia. Around the Lake Victoria region, light to moderate rainfall was observed over Uganda, northern Tanzania and southwestern Kenya during the 3rd dekad of March.

While increased, isolated rains fell in the eastern Amhara and Afar regions of Ethiopia during the last week, many belg-producing areas continue to experience strengthening seasonal dryness characterized by a delayed start and/or an erratic rainfall distribution since February. Analysis of satellite estimated rainfall anomalies over the past 30 days depict mainly below-average moisture conditions, with only isolated pockets of favorable, above-average rainfall conditions (**Figure 2**). At present, the strongest moisture deficits are located across the Afar region and along the higher elevations of the Rift Valley. Outside of Ethiopia, a strengthening of moisture deficits has also been observed throughout much of Uganda and norther eastern Tanzania. Although the dryness in the southern portion of the Horn may lead to adverse ground impacts, suppressed seasonal rainfall in Ethiopia may exacerbate ground conditions following two consecutively failed rainfall seasons in the region.

During the late March, precipitation forecasts suggest a moderate potential for enhanced rainfall across the highlands of Ethiopia during early April, which is expected to help alleviate anomalous dryness and moisture deficits in the region.

Heavy March rainfall in southern Africa pushes eastward continues to relieve dryness over Mozambique and Madagascar.

With the ongoing moisture recovery being felt throughout much of southern Africa, an eastward shift in the monsoon circulation concentrated significantly heavy rainfall accumulations (>100mm) over many severely dry portions of Mozambique and Madagascar during the last seven days (**Figure 3**). Climatologically, the enhanced rainfall during late March is highly unusual, as rains typically begin to weaken throughout southeastern Africa. However, increased rains and ground moisture are expected to be greatly favorable for many drought stricken areas, as it is expected to replenish water resources/availability, and may benefit cropping areas that planted later into the season due to poor rainfall conditions and delayed starts that negatively affected many areas earlier in the season.

Satellite-Estimated Rainfall (mm)
Valid: March 20 – March 26, 2016

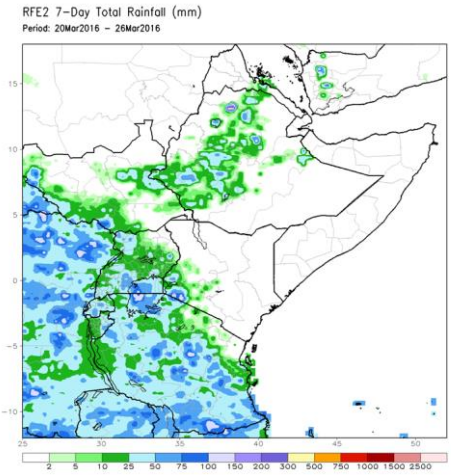


Figure 1: NOAA/CPC

East Africa 30-day Satellite-Estimated Rainfall Anomaly (mm)
Valid: February 26 - March 26, 2016

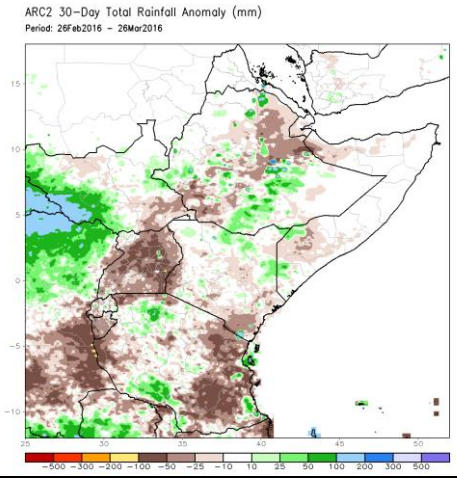


Figure 2: NOAA/CPC

Southern Africa 30-day Precipitation Anomaly Difference (mm)
As of: March 26, 2016

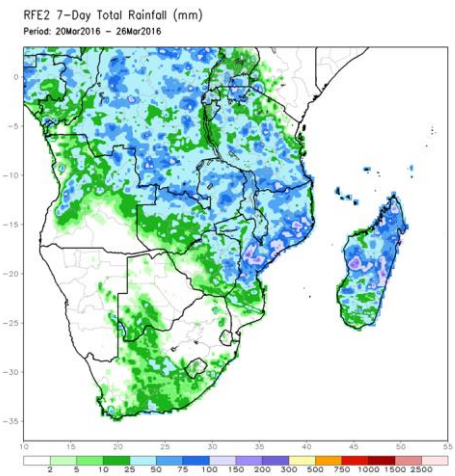


Figure 3: NOAA/CPC

Note: The hazards outlook map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.

Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-683-3424.